

From: ["Young, Howard S." <younghs@cdmsmith.com>](mailto:younghs@cdmsmith.com)  
To: ["Sheldrake, Sean" <sheldrake.sean@epa.gov>](mailto:sheldrake.sean@epa.gov)  
["Zhen, Davis" <Zhen.Davis@epa.gov>](mailto:Zhen.Davis@epa.gov)  
CC: ["Scott Coffey" <coffeyse@cdmsmith.com>](mailto:scottcoffey@cdmsmith.com)  
[younghs@cdmsmith.com](mailto:younghs@cdmsmith.com)  
["Trump, Julee M." <trumpjm@cdmsmith.com>](mailto:trumpjm@cdmsmith.com)  
Date: 4/13/2018 4:19:40 PM  
Subject: FW: GPS email

---

Sean and Davis,

As detailed in the daily reports, the surface sediment sampling crews have modified their procedures for quality control on the GPS instrumentation used in recording stratified random sediment sample coordinates. The surface sediment sampling FSP Appendix B1 – Horizontal and Vertical Station Control, indicates that the GPS controls points and procedures are provisional during the first two weeks of the sediment sampling and that any changes or modifications made during this period would be communicated to EPA for approval. Today is the end of that initial 2-week period and the changes to the GPS quality control procedures must be communicated to EPA for approval. The changes that we have observed include:

- \* Using a different GPS position check control point. They have been using a surveyed piling at the Fred Devine dock instead of the survey control point PH-1 to check the position accuracy of the vessel-based GPS. A new reference point at the sample processing building is being used for the position check of the handheld GPS instead of control point PH-1.

- \* On 4/11/2018, use of the handheld GPS as a secondary check on the vessel GPS was discontinued.

- \* Position checks are performed in the morning only instead of at the start and end of the day.

At this point it is critical that the new GPS quality control procedures be provided to EPA in a revised SOP so that EPA can verify the modified procedures are acceptable to meet the 1 to 2 meter accuracy requirement and oversight inspectors can determine that the correct procedures are followed.

EPA will need to decide whether the work can continue beyond this initial 2-week period without the revised SOP or if this is a stop work condition. I drafted some text below for your use in requesting the modified procedures.

Ken,

EPA requests the revised procedures for GPS use and horizontal and vertical station control prior for review and approval prior to continuing the surface sediment sampling. Per FSP Appendix B1 – Horizontal and Vertical Station Control, AECOM will inform EPA of any changes made to the horizontal and vertical control procedures during the initial 2-weeks of the investigation for approval. EPA oversight staff have noted deviations from the Appendix B-1 in the GPS position check procedures which were communicated to field staff. It is necessary for EPA to have the revised procedures and the ability to confirm that the GPS used in sample location recording is meeting the 1 -2 meter accuracy requirement of the FSP on a daily basis. Please submit the revised horizontal and vertical control SOP to EPA for review and approval.

Thank you,  
Davis